Giving teachers bonuses for student achievement undermines student learning

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Recent efforts to improve teacher performance by linking pay to student achievement have failed because such programs often rely on metrics that were never intended to help determine teacher pay, contends Derek Neal, Professor of Economics at the University of Chicago.

"Many accountability and performance pay systems employ test scores from assessment systems that produce information used not only to determine rewards and punishments for educators, but also to inform the public about progress in student learning," Neal writes in the paper, "The Design of Performance Pay in Education."

These testing systems make it easy, in theory, for policymakers to obtain consistent measures of student and teacher performance over time. But Neal argues that the same testing regimes also make it easy, in practice, for educators to game incentive systems by coaching students for exams rather than teaching them to master subject matter.

"As long as education authorities keep trying to accomplish both of these tasks (measurement and incentive provisions) with one set of assessments, they will continue to fail at both tasks," he adds in the paper, which was published by the *National Bureau of Economic Research* and is a chapter in the upcoming Handbook of Economics of Education.

Although a great deal has been written about the results of pay bonuses for teachers linked to student achievement, few studies have actually

examined the design of those programs, Neal said. Working with his own research and that of others on achievement, he explored why many incentive programs are unsuccessful.

In some rare instances, teachers have cheated in response to the pressure of high-stakes tests. In other cases, teachers may avoid instruction that leads to more comprehensive learning while increasing time devoted to activities that prepare students for upcoming assessments. For example, they may decide to skip writing and simply ask students to practice finding grammar mistakes in passages written by others.

In other cases, teacher incentive programs based on student achievement have encouraged teachers to leave schools in which most students come from disadvantaged backgrounds, research shows.

Still, other programs appear to fail because they set the performance standards so high that teachers felt they had little chance winning reward payments by working harder.

Neal writes that education officials should separate the provision of incentives and the measurement of student and educator performance by using separate testing programs for these two tasks. Neal said that reward pay should be attached to the results of assessments that vary enough annually so that they are not predictable, and therefore do not invite coaching. Such assessments may provide little information about whether long-term trends in student achievement are positive or negative, but the results provide enough information for reward pay systems that base yearly bonuses for teachers on the performance of their students relative to students from similar backgrounds in other schools.

Separate assessment systems that involve no stakes for teachers, and thus no incentives for manipulation, should be used to produce measures of

student performance over time, Neal contends. This two-system approach would discourage excessive "teaching to the test."

"The designers of assessment-based incentive schemes must take seriously the challenge of designing a series of assessments such that the best response of educators is not to coach, but to teach in ways that build true mastering," Neal said.

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